

Cacti

A Prickle Free Lesson



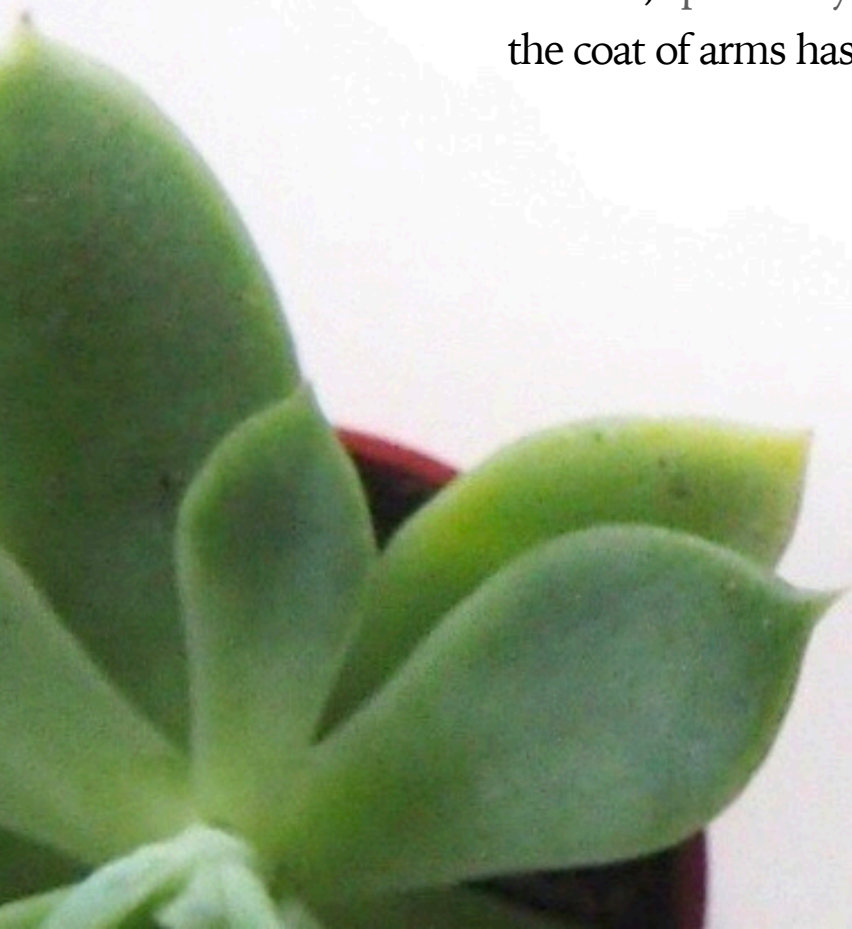
Cacti & Succulents

A Thorn by Any Other Name

The beautiful desert plant we call the cactus isn't tough to love, even if it can be painful to touch. In this report we'll learn about how cacti have evolved.

When Mexico achieved self-sovereignty in the 1820s, it adopted a coat of arms that includes a cactus, specifically the prickly pear. Though the coat of arms has changed over in the

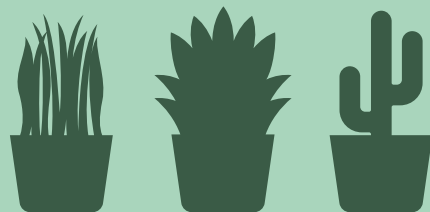
nearly 200 years since, the cactus has remained. Cacti and succulents are terms sometimes confused with each other. It can help, at the start, to understand that succulents make up a very large group of plants, of which the vast majority of cacti are simply one subset among many. Succulents in general, and cacti among them, thrive in dry climates, especially deserts.



The Succulent Parts

Cacti and, more generally, succulents come in numerous forms, but once you have learned to appreciate that cacti prickles are really just very sharp leaves, the correlation between them and more common plants becomes clear, as does their anatomy.

There are many ways to slice a succulent, and many types of succulents, and thus many ways to chart its parts. Learn how to build your dry garden.



Cactus Pointers

Stems:

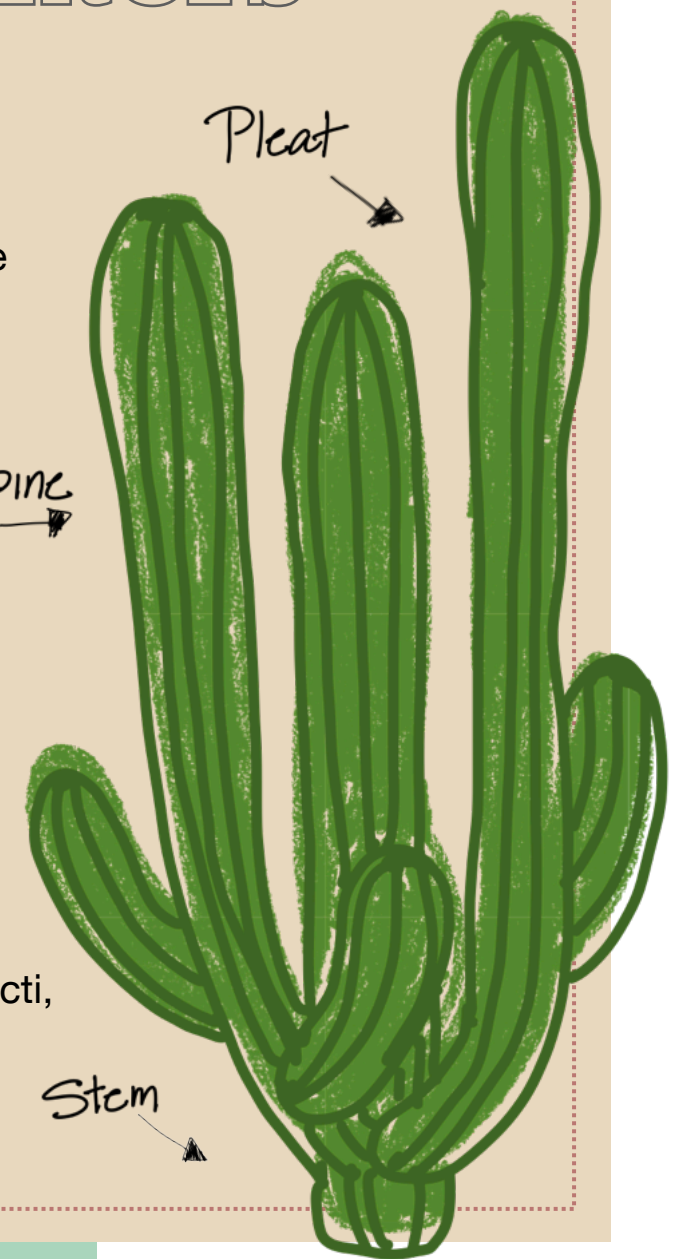
the fleshy parts of the body of the plant, sometimes called a “trunk” in large, thick plants

Spines:

the extended needle-like appendages, which are in fact a form of leaf

Pleats:

the folds that appear in the skin of large cacti, such as the saguaro



The Past + Future of Succulents

How They Got This Way

Cacti not only live but thrive in some of the harshest environments on our planet. Their form has evolved to adapt to a climate that has made survival so difficult that the desert can often feel devoid of life. And yet life flourishes there, and has adjusted to the limited water, native animals, and less than fecund soil.

The cactus's prickly points keep away wildlife that hungers for its fruity, flesh leaves. Those leaves, with their succulent tissue, retain water for extended periods of time beneath a waxy surface skin. And its shallow roots let it maximize its intake of moisture in a sun-drenched climate where any liquid is quick to evaporate.

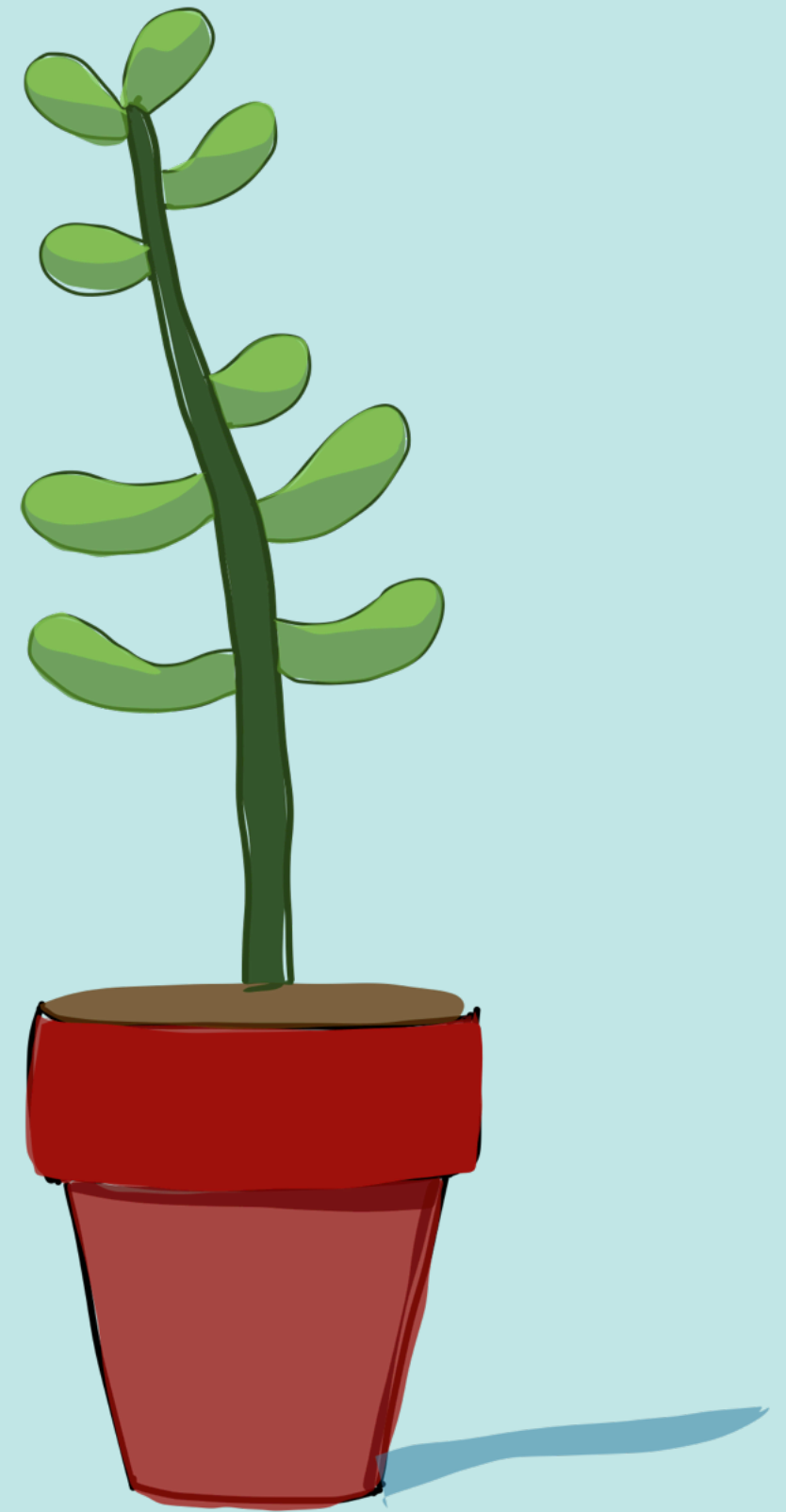
Conservation

Succulents have proven especially useful in heavily populated, drought-struck regions. They have replaced water-intensive plants in yards and gardens, thus significantly contributing to the reduction of water usage. However, just because succulents, such as cacti, can help in environmental efforts doesn't mean they themselves don't require conservation.



The Botanic Gardens Conservation International lists numerous threats, including habitat degradation, climate change, and a growing global consumer market. As of 2006, more than 350 types of succulents are considered under threat.

The word *cactus* derives from the Ancient Greek *kaktos*, a name for a spiny plant whose identity is not certain.



The Benefits of Plants



A succulent menagerie may look good on the windowsill, but cacti are also practical:

Get Sacred

A plant's history doesn't go back to ancient times without accruing spiritual associations, and succulents are particularly rich in this regard. Houseleek, as its name suggests, was planted on roofs — but beyond that practicality, it was also said to ward off lightning strikes and witchcraft.

Eat 'Em

All cacti are edible, but not all are equally tasty. Some agave are particularly popular, not just as ingredients in cooking but as

Self Care

Aloe: King of Cosmetics



The qualities that make aloe an aid for sunburn mean it's of similar use for general skincare.



Houseleek and other succulents have also been used to address skin irritations.



Many commercial cosmetics use succulents in their recipes.

the basis for tequila. The lemony Purslane is recommended for stews and soups. Many are used as herbs, such as the Indian Borage, which has an oregano-like quality, and the Jewels of Opar, whose leaves have a tangy taste.

Get Healthy

Aloe vera, with its gels and juices, has benefits that include digestion and skin healing, the latter in particular for burns. Aloe, however, is not alone in its medicinal benefits. Sea Asparagus (also known as Glasswort, Marsh Samphire, and Sea Pickle) is a natural diuretic, high in vitamin C. The *Rhodiola rosea* is said to help with depression and weight loss.

Build a Dry Garden



Plants

Soil

Bowls

What You Need:



Plants:

Some succulents need more light and/or water than others. Read up on the types that are right for where you plan to put them.



Pots or Bowls:

One nice thing about the relatively shallow roots and minimal water usage of these plants is you can put them in an ordinary bowl — no drainage required.



Soil:

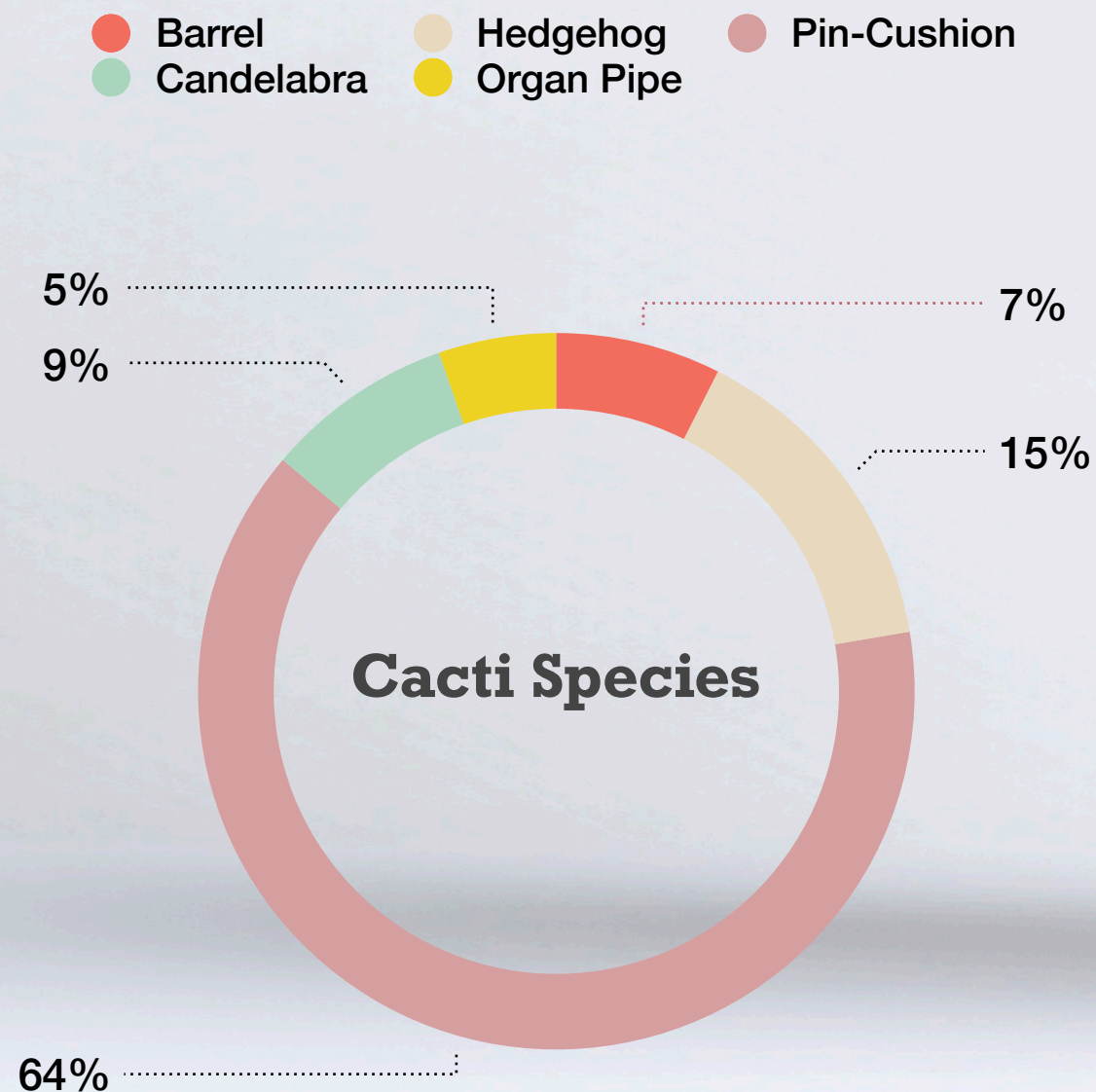
If you've been in the desert, you might think a cactus can grow anywhere, but it still needs proper soil. Choose a mix optimized for succulents.



**There are
a vast number of
types of
succulents,
roughly sixty
families in all.
Those sixty
families contain
multitudes of
species.**

Species of Cacti

In the arid and semiarid environments of the Americas, there are many species of cacti that flourish. For the animals that live there, cacti can provide important aspects of their habitat particularly the candelabra and saguaro.



A World of Cacti



South America